CLAIMS

1	1. A method for sending data across a network, comprising:
2	associating sequence information with the data, the sequence information further
3	comprising a sequence number and an expected sequence number;
4	sending the data and associated sequence information to a remote location;
5	receiving the sent data and associated sequence information at the remote location; and
6	determining, based on the associated sequence information, whether the received sent
7	data should be accepted.
1	2. The method of claim 1, wherein the step of determining, based on the associated
2	sequence information, whether the received sent data should be accepted further comprises:
3	accepting the received sent data if the expected sequence number associated with the
4	received sent data matches a sequence number associated with data previously
5	received at the remote location.
1	3. The method of claim 1, wherein the step of determining, based on the associated
2	sequence information, whether the received sent data should be accepted further comprises:
3	rejecting the received sent data if the expected sequence number associated with the
4	received sent data does not match a sequence number associated with data previously
5	received at the remote location.
1	4. The method of claim 1, further comprising:
2	responsive to a determination that the received data should be accepted:
3	accepting the data; and

#	sending an acknowledgement indicating that the data has been accepted.
1	5. The method of claim 1, further comprising:
2	responsive to a determination that the received data should not be accepted:
3	sending a retry request indicating that the data has not been accepted.
1	6. A method for transmitting data across a network, comprising:
2	associating a sequence number with the data;
3	associating an expected sequence number with the data, the expected sequence number
4	related to data previously transmitted across the network; and
5	transmitting the data, associated sequence number and expected sequence number across
6	the network.
1	7. The method of claim 6, further comprising:
2	receiving a response indicating whether the data was successfully received by a remote
3	receiver; and
4	responsive to an indication that the data was not successfully received, re-sending the
5	data.
1	8. A method for receiving data sent across a network, comprising:
2	receiving a first data packet, the first data packet comprising data, a sequence number, an
3	expected sequence number, and a node-ID;
4	determining whether a second data packet has already been received, wherein the second
5	data packet has a sequence number corresponding to the expected sequence number
6	of the first data packet; and
7	responsive to a determination that the second data packet has already been received:
8	storing the data of the first data packet.

1	9. The method of claim 8, further comprising sending an acknowledgement
2	indicating that the first data packet has been stored.
4	10. The weeks I of claim 9 footh and the
1	10. The method of claim 8, further comprising:
2	responsive to a determination that the second data packet has not been received:
3	sending a retry request indicating that the first data packet was not accepted.
1	11 A mosthod for an ding data array a naturally she data transmitted 11 Co. 1 .
1	11. A method for sending data over a network, the data transmitted by a first device
2	coupled to a bus, the data written to a second device coupled to a second bus, the first bus and the
3	second bus each coupled to the network, the method comprising:
4	determining sequence information for the data, further comprising:
5	associating a sequence number with the data;
6	associating an expected sequence number with the data, the expected
7	sequence number related to other data previously transmitted over the
8	network;
9	transmitting the data over the network;
10	receiving response information indicating whether the data was accepted; and
11	responsive to an indication that the data was not accepted:
12	re-transmitting the data.
1	12. A mosth of formation fine data married account to the last of
1	12. A method for writing first data received over a network to a device on a bus, the
2	method comprising:
3	determining sequence information associated with the first data, further comprising:
4	determining a sequence number associated with the first data;
5	determining an expected sequence number associated with the first data;
6	determining whether the expected sequence number corresponds to a sequence number of
7	second data previously received;

8	responsive to the expected sequence number corresponding to the sequence number of
9	the second data:
10	writing the first data to the bus;
11	sending an acknowledgement message; and
12	responsive to the expected sequence number not corresponding to the sequence
13	number of the second data, sending a retry request message.
1	13. A method for writing data to a device on a bus, comprising:
2	receiving a first data packet over a network, the first data packet comprising a sequence
3	number and a first data;
4	receiving a second data packet over the network, the second data packet comprising an
5	expected sequence number and a second data;
6	responsive to the expected sequence number corresponding to the sequence number:
7	storing the second data.
1	14. The method of claim 13 further comprising:
2	sending an acknowledgement message indicating that the second data has been stored.
	15 77
1	15. The method of claim 13 further comprising:
2	responsive to the expected sequence number not corresponding to the sequence number:
3	sending a retry request message indicating that the second data has been
4	rejected.
1	16. A system for transferring a data packet across a network, the data packet comprising
1	
2	data, a sequence number and an expected sequence number, the system comprising:
3	a sending module, for sending the data packet across the network, and further
4	comprising:
5	a bus communication module, for receiving the data from a bus;

В	a sequencing module, for assigning the sequence number and the expected
7	sequence number to the data packet;
8	a data transmission module, for transferring the data packet a receiving
9	module across the network;
10	the receiving module, coupled to the network, for receiving the data packet, and further
11	comprising:
12	a sequence table module, for determining whether the data packet has been
13	received in a correct order;
14	a data buffer for storing the data; and
15	an acknowledgement module, for sending an acknowledgement to the
16	sending module.
1	17. The system of claim 16, wherein the receiving module further comprises:
2	a request buffer for storing header information associated with the data packet; and
3	a DMA engine for writing the data to a bus.